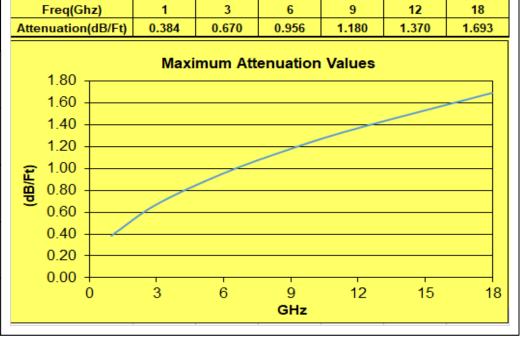


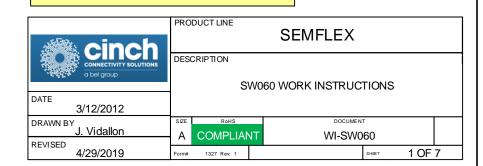
Part	Description	Diameter	
1 – Center Conductor	Silver Plated Copper- Solid	0.011" +/- 0.001	
2 – Dielectric	Microporous PTFE Tape	0.033" (nominal)	
3 – Outer Conductor	Silver Plated Copper Flat Braid	0.039" (nominal)	
4 – Shield	Silver Plated Copper Round Braid	0.049" (nominal)	
5 – Jacket	Extruded FEP	0.060+/003"	
J – Jacket	Extruded Polyurethane	NA	

VSWR	1.20 : 1
Impedance	50 +/- 2 ohms
Velocity of Propagation	75% Nominal
Delay	1.36ns/ft
Capacitance	27 pF
Maximum Frequency	18Ghz



**CABLE OVERVIEW** 

Note: +5% IL deviation is allowed at 8-18Ghz.









Braider setup

BRAIDER SET-UP				
BRAIDER	16 CARRIER STEEGER			
SIZING DIE	0.039"			
PICKS	22 +/- 0.5			
GEAR SIZE	34/22			
SPEED SETTING	100-150 ft/hr (typical)			
TENSION SETTING	Green Spring			
DIE HEIGHT	4.5-5.0" from the top of the carriers			
TARGET OD	0.037 - 0.041"			

\*Excessive handling can deteriorate IL performance. No re-spooling of cable prior to RB.

#### Notes:

- 1. Run 20ft length of cable through flat braid for first article sample and submit for electrical testing as per ETP70307 at initial setup and every new spool of core. Use connector PN: **SMA109PF**
- 2. Keep machine properly lubricated and clean tracks to prevent braid break.
- 3. All splices must be properly trimmed and bad spots marked.
- 4. Set and verify pay-off and take-up tension just enough to feed and wind cable properly. Too high tension can cause flat spot.
- 5. Check and ensure that all braids are on the guide rollers and are not twisted before running the braider.
- 6. Prevent lube and machine oil from coming in contact with the cable.
- 7. During setup, ensure that the tensions on each of the carriers are the same.
- 8. Allow 5-6 loops of cable on the capstan to get sufficient traction. Putting too much loops may cause flat spot.

### **FLAT BRAID PROCESS**

MACHINE:	
ST1 OR ST2	

REF. DOC
MGW44
MGF86
MGF88

ITEM	PART NO.	DESCRIPTION
1	80155-01	.010" X 0.0015" SPC FLAT WIRE
2	80234	0.0108" SPC SOLID CONDUCTOR WITH PTFE MARLON CORE

cinch connectivity solutions		PRODUCT LINE SEMFLEX			
		CRIPTION			
a bel group	SW060 WORK INSTRUCTIONS				
DATE 3/12/2012					
DRAWN BY J. Vidallon	SIZE	RoHS	DOCUMENT		
REVISED	Α	COMPLIAN	WI-SW060		
4/29/2019	Form#	1327 Rev. 1	SHET	2 OF	7

BRAIDER SET-UP				
BRAIDER	16 CARRIER STEEGER			
SIZING DIE	0.086"			
PICKS	19 +/- 1			
GEAR SIZE	30/22			
SPEED SETTING	100-150 ft/hr (typical)			
TENSION SETTING	Green Spring			
TARGET OD	0.048" - 0.050"			
DIE HEIGHT	4.5-5" from the top of the carriers			



\*Excessive handling can deteriorate IL performance. No unnecessary re-spooling of cable prior to extrusion.



Braided Cable

#### Notes:

- 1. Keep machine properly lubricated and clean tracks to prevent braid break.
- 2. All splices must be properly trimmed and bad spots marked.
- 3. Adjust take-up tension and traverse to prevent flattening of cable.
- 4. Check each braid to ensure that the ends are not mess-up (no leading or lagging end) before starting the machine. Leading or lagging braid end will cause frequent braid break. Check also when loading new bobbins.
- 5. Prevent lube and machine oil from coming in contact with the cable.
- 6. Ensure that the tensions on each of the carriers are the same.
- 7. Allow 5-6 loops of cable on the capstan to get sufficient traction. Putting too much loops may cause flat spot.

MACHINE:	REF. DOC	
ST1 or ST2	MGW44	

ITEM	PART NO.	DESCRIPTION
1	80156-01	43AWG SPC 5 ENDS

## **ROUND BRAID PROCESS**

cinch		SEMFLEX				
CONNECTIVITY SOLUTIONS a bel group	DES	CRIPTION				
122	SW060 WORK INSTRUCTIONS					
DATE 3/12/2012						
DRAWN BY	SIZE	RoHS		DOCUMENT		
J. Vidallon	Α	COMPLIAN	۷Ť	WI-SW060		
4/29/2019	Form#	1327 Rev. 1		SHEET	3 OF	7

# - NO DASH - SLATE BLUE FEP JACKET

EXTRUDER SET-UP				
TIP	0.120 or 150			
DIE	0.230 or 312			
SCREW SPEED	~1 - 4 ref only			
TRACTOR SPEED	Adjust to meet OD/jacket finish			
COOLING TROUGH TEMP	120-140 deg F			
MIN SPARK TESTER VOLTAGE	1.0 KV			
JACKET OD	0.057 - 0.063"			
COLOR MIX RATIO	40 OZ / 55 LBS			
MARKING	SEMFLEX INC. SW060 YYMM WO			

TEMPERATURE SETTING (deg F)			
Zone 1 690	Zone 2 <b>710</b>	Zone 3 <b>718</b>	
Body <b>760</b>	Tip/Die 760	Flange 745	

- Note: 1. Temp settings are nominal and can be adjusted(+/-10 deg F) based upon the quality of the melt flow. Adjust screw speed also if needed to get good melt quality.
  - 2. Adjust tractor speed to attain target diameter.
  - 3. Set jacket print on the Domino printer as per MGW64.
  - 4. Refer to visual aid/samples provided for color match verification.
  - 5. Refer to individual setup sheet created for more detailed setup and adjustments.

# JACKET AND MARKING PROCESS

MACHINE:	REF. DOC
EXTRUDER LINE	MGW48
DOMINO PRINTER	MGW64
	MGF89

ITEM	PART NO.	DESCRIPTION
1	80013	Dupont FEP
2	80141	COLOR CONCENTRATE - DUSK

cinch	PRODUCT LINE						
CONNECTIVITY SOLUTIONS	DES	CRIPTION					
a bel group	SW060 WORK INSTRUCTIONS						
DATE 3/12/2012							
DRAWN BY J. Vidallon	SIZE	RoHS		DOCUMENT			
REVISED	Α	COMPLIAN	11	WI-SW060	0		
4/29/2019	Form#	1327 Rev. 1		SH	HEET	4 OF	7

# A. ELECTRICAL TEST:

- 1. CUT A 20FT SAMPLE FOR EVERY 1000FT OF FINISHED CABLE AND PERFORM FINAL TEST AS PER ETP 70307.
- 2. SAVE ELECTRICAL DATA IN THE ELECTRICAL TEST FOLDER.

# **B. MECHNICAL TEST:**

- 1. CUT 3PCS OF 1FT SECTION OF FINISH CABLE PER LOT.
- 2. DISSECT AND VISUALLY INSPECT 1 OF THE 3 SAMPLES TO VERIFY LOCATION OF EACH LAYER.
- 3. MEASURE EACH LAYER AND FILL IN CABLE ACCEPTANCE TEST SHEET BELOW.





# **CABLE ACCEPTANCE TEST**

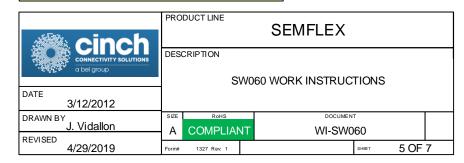
CUSTOMER:	
PART NUMBER:	
DATE:	

PO#:	
WORK ORDER #:	
QUANTITY:	

PARAMETER	REQUIREMENT	<u>MEASUREMENT</u>
CONDUCTOR OD		
CORE OD		
INNER SHIELD OD		
OUTER SHIELD OD		
JACKET OD		
JACKET COLOR & MARKING		
ELECTRICAL TEST		

INSPECTED BY:	
DATE:	

#### **TESTING AND INSPECTION**



## PACKAGING REQUIREMENTS:

- 1. PREPARE FOOTAGE SHEET (C-SHEET PER SPOOL).
- 2. ALL SHIPMENTS TO WASECA MUST INCLUDE A HARD COPY OF THE FINAL ELECTRICAL TEST, CABLE ACCEPTANCE TEST AND FOOTAGE SHEET.
- 3. ALL SALES ORDER SHIPMENTS MUST INCLUDE C-SHEETS ONLY UNLESS OTHERWISE REQ'D BY CUSTOMER.
- 4. VERIFY CUSTOMER PO/DRAWING FOR CONTINUOUS LENGTH AND PACKAGING REQ'T.

ADDITIONAL NOTES TO SHIPMENT TO ECM:

- 1.NO MORE THAN 250FT PER REEL.
- 2.IF THERE ARE TWO OR MORE LOT NUMBERS OF A CABLE IS BEING SHIPPED, THE LOTS MUST BE SPOOLED SEPARATELY.
- 3.INCLUDE CABLE ACCEPTANCE SHEET WITH ALL SHIPMENTS.

